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Study of disperse polymer systems for producing high-quality polymeric-bituminous materials

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Abstract

Distribution of components of disperse polymer systems used for producing bituminous materials was determined in terms of polymer quantity and particle size in o-xylene solution by conductometric dispersion analysis method using a Coulter counter. Polymer concentrations at which the dispersity, surface tension, and dynamic viscosity of the disperse system are optimum for blending the polymer with the bitumen and producing the polymeric-bituminous materials with assigned service properties are determined. © 2012 Springer Science+Business Media New York.

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Keywords

conductometric method, dynamic viscosity, polymer dispersion, quantitative and dispersion analysis, surface tension